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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,609	05/17/2001	Eiichi Naito	5077-000043	4991

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HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

PANNALA, SATHYANARAYA R

ART UNIT	PAPER NUMBER
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2167

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/859,609

Applicant(s)

NAITO ET AL.

Examiner

Sathyanarayan Pannala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 08/16/04. 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/16/2004 has been entered.
2. Applicants' Amendment filed on 8/16/2004 has been entered with claims 19-21, 23 and 26 as amended. Claims 19-27 are pending in this Office Action.

Information Disclosure Statement

3. The information disclosure statement filed on 8/16/2004 fails to comply with 37 CFR 1.98(a)(2)-(3), (b)(4) because it does not include a concise explanation of the relevance as a foreign patent application and the notice of rejection will not be considered or substituted as prior art, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The analysis under 35 U.S.C. 112, first paragraph, requires that the scope of protection sought be supported by the specification disclosure. The pertinent inquiries include determining (1) whether the specification disclosure as a whole is to enable one skilled in the art to make and use the claimed invention.

5. Claims 19 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Fig. 7, page 13, lines 23-25, does not support fully the claimed language and more clarification is needed since as per the specification states as "the number of clusters having two or more elements was largest." The term "programmatically" is not in the specification.

Undue experimentation and ingenuity would be required beyond one ordinarily skilled in the art to practice: 1) The number of clusters having two or more elements was largest. 2) The term "programmatically" is not in the specification.

Undue experimentation would be needed to make a determination of whether the data in source database is partitioned are not.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 19 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 19 and 26, "clustering means is configured to programmatically enforce a rule where the number of the plurality of clusters is determined such that the number of clusters having two or more elements of the plurality of clusters is maximized."

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 19-27 are rejected under 35 U.S.C. § 102(b) as being anticipated by Herz (U.S. Patent 6,029,195).

10. Herz anticipated independent claim 19 by the following:

“document storage means for storing the plurality of documents” at col. 9, lines 26-30;

“feature amount extraction means for extracting a feature amount of each of the plurality of documents” at col. 11, lines 44-50;

“clustering means for classifying the plurality of documents into a plurality of clusters based on the extracted feature amounts so that each cluster includes one document or a plurality of documents having feature amounts similar to each other as an element” at col. 27, line 62 to col. 28, line 12;

“clustering means is configured to programmatically enforce a rule where the number of the plurality of clusters is determined such that the number of clusters having two or more elements of the plurality of clusters is maximized” at col. 5, lines 33-36;

“document retrieval means for retrieving a document satisfying a retrieval condition input by the user among the plurality of documents” at col. 31, lines 55-67;

“interface means for presenting the retrieved document together with the rest of documents included in a cluster to which the retrieved document belongs, as retrieval results” at Fig. 2, col. 34, lines 56-64;

“wherein the number of the plurality of clusters is determined such that the number of clusters having two or more elements of the plurality of clusters is at the largest” at Fig. 2, col. 50, lines 36-38.

11. Herz anticipated independent claim 20 by the following:

“document storage means for storing the plurality of documents” at col. 9, lines 26-30;

“feature amount extraction means for extracting a feature amount of each of the plurality of documents” at col. 11, lines 44-50;

“clustering means for classifying the plurality of documents into a plurality of clusters based on the extracted feature amounts so that each cluster includes one document or a plurality of documents having feature amounts similar to each other as an element” at col. 27, line 62 to col. 28, line 12;

“cluster term label preparation means for automatically selecting one or more terms, which is or are arranged in order of high term score, as a label of the cluster, for each of the plurality of clusters, the term score being obtained by calculating the number of documents in which a term appears in the cluster, for each of the terms included in documents belonging to the cluster” at Fig. 12, col. 27, line 62 to col. 28, line 12 and col. 19, line 29 to col. 20, line 17;

“document retrieval means for retrieving a document satisfying a retrieval condition input by the user among the plurality of documents” at col. 31, lines 55-67;

“interface means for presenting the retrieved document together with the label of the cluster, to which the retrieved document belongs, and the rest of documents belonging to the cluster, as retrieval results” at Fig. 2, col. 34, lines 56-64.

12. Herz anticipated independent claim 21 by the following:

“document storage means for storing the plurality of documents” at col. 9, lines 26-30;

“feature amount extraction means for extracting a feature amount of each of the plurality of documents” at col. 11, lines 44-50;

“clustering means for classifying the plurality of documents into a plurality of clusters based on the extracted feature amounts so that each cluster includes one document or a plurality of documents having feature amounts similar to each other as an element” at col. 27, line 62 to col. 28, line 12;

“cluster sentence label preparation means for automatically selecting one sentence as a label of the cluster based on a term score for each of the plurality of clusters, the sentence being included in documents belonging to the cluster, the term score being obtained by calculating the number of documents in which a term appears in the cluster, for each of the terms included in documents belonging to the cluster” at Fig. 12, and col. 19, line 29 to col. 20, line 17;

“document retrieval means for retrieving a document satisfying a retrieval condition input by the user among the plurality of documents” at col. 31, lines 55-67;

“interface means for presenting the retrieved document together with the label of the cluster, to which the retrieved document belongs, and the rest of documents belonging to the cluster, as retrieval results” at Fig. 2, col. 34, lines 56-64.

13. Herz anticipated dependent claim 22, “the cluster sentence label preparation means work out a sum of term scores of all terms included in the sentence, and select a sentence in which the sum of the term scores is largest as a label of the cluster, for each of the sentences included in documents belonging to the cluster” at Fig. 5, col. 72, lines 10-26.

14. Herz anticipated independent claim 23 by the following:

“document storage means for storing the plurality of documents” at col. 9, lines 26-30;

“feature amount extraction means for extracting a feature amount of each of the plurality of documents” at col. 11, lines 44-50;

“clustering means for classifying the plurality of documents into a plurality of clusters based on the extracted feature amounts so that each cluster includes one document or a plurality of documents having feature amounts similar to each other as an element” at col. 27, line 62 to col. 28, line 12;

“cluster label preparation means for automatically generating a cluster label representing the a contents of the cluster based on terms contained in feature

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vectors, for each of the plurality of clusters at Fig. 12, and col. 19, line 29 to col. 20, line 17;

“document label preparation means for preparing a document label representing the contents of the document, for each of the clustered documents” at Fig. 5, col. 72, lines 10-26;

“document retrieval means for retrieving a document satisfying a retrieval condition input by the user among the plurality of documents” at Fig. 5, col. 72, lines 10-26;

“interface means for presenting the retrieved document together with the cluster label of the cluster to which the retrieved document belongs, the rest of documents belonging to the cluster, and the document labels which are associated with each of the retrieved document and the rest of documents, as retrieval results” at Fig. 2, col. 34, lines 56-64.

15. Herz anticipated dependent claim 24, “the document label preparation means selects one sentence characterizing the document from all sentences in the document as the document label” at Fig. 2, 10, col. 65, lines 19-48.

16. Herz anticipated dependent claim 25, “the document label preparation means selects one sentence as the document label based on appearance frequency information of terms included in the document” at col. 86, line 67 to col. 87, line 4.

17. Herz anticipated independent claim 26 by the following:

"document storage means for storing the plurality of answer documents and a plurality of question documents, at least one or more question documents being associated with each of the answer documents" at col. 9, lines 26-30;

"feature amount extraction means for extracting a feature amount of each of the plurality of answer documents" at col. 11, lines 44-50;

"clustering means for classifying the plurality of answer documents into a plurality of clusters based on the extracted feature amounts so that each cluster includes one document or a plurality of documents having feature amounts similar to each other as an element" at col. 74, lines 7-28;

"clustering means is configured to programmatically enforce a rule where the number of the plurality of clusters is determined such that the number of clusters having two or more elements of the plurality of clusters is maximized" at col. 5, lines 33-36.

"question document retrieval means for retrieving a question document conforming with a user question input by the user among the plurality of question documents" at Fig. 5, col. 71, lines 20-29;

"interface means for presenting the retrieved question document and the answer document associated with the question document together with the rest of answer documents included in the cluster to which the answer document belongs, as retrieval results" at col. 86, lines 25-37.

18. Herz anticipated dependent claim 27, "the interface means receives selection of an answer document by the user among the answer documents of the presented

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retrieval results, and the information retrieval system further comprises document upgrading means for newly storing the document of the user question in the document storage means in association with the selected answer document” at col. 3, line 54 to col. 4, line 3.

Response to Arguments

19. Applicant's arguments filed 8/16/2004 have been fully considered but they are not persuasive and details as follows:

a) Applicant's argument stated as “Applicants respectfully request Examiner to consider his position and show that the Chinese office action has been considered.”

In response to the Applicant's argument, examiner disagrees and the reasons are given under the paragraph “Information Disclosure Statement”.

b) Applicant's argument states as “In order to more fully distinguish Applicants' invention from Herz, independent claims 19 and 26 have been amended to recite the structural configuration.”

In response to Applicant's argument, examiner disagrees because claims 19 and 26 as well as the specification does not clarify the distinction from the prior art, Herz.

c) Applicant's argument states as “Independent claims 20 and 21 have also been amended to recite that the cluster label preparation means is automatic.”

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In response to Applicant's argument, examiner informs the applicant that the clustering is done automatically by the prior art, Herz.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sathyanarayan Pannala whose telephone number is (571) 272-4115. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sathyanarayan Pannala
Examiner
Art Unit 2167

srp
January 13, 2005


GRETA ROBINSON
PRIMARY EXAMINER